The opinion in support of the decision being entered today was ***not*** written for publication and is ***not*** precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GIANCARLO PETTAZZI and EMILO RIVA

Appeal No. 1998-0882
Application 08/598,416

ON BRIEF

Before HAIRSTON, JERRY SMITH and HECKER, ***Administrative Patent Judges***.

HECKER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 4 through 7 and 10 through 12, all pending claims in this application[1].

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[1] Although claim 9 appears in the appendix to the brief, it has been canceled.

The invention relates to a high speed image processing system. In particular, a processor processes a source image in sequential portions or slices. Source image pixels are fetched from the host memory and stored in pixel buffers. Pixels stored in the pixel buffers are resampled and transformed. The pixel fetching process from the source memory and the pixel buffer's resampling operation are performed simultaneously. While a new pixel row is fetched from the source memory, the previous two rows stored in the pixel buffers are processed. The transformed pixels are then transferred to a pixel display memory for display.

Representative independent claim 1 is reproduced as follows:

1. A single image processor apparatus for transforming an image comprising:

a) within said single image processor, a first means for transferring image pixel data from a memory to a temporary storage a portion of image pixel data at a time;

b) said means, within said single image processor, for sampling each temporarily stored portion of said image pixel data, wherein the first means for transferring includes transferring a portion of image pixel data while the means for sampling is concurrently sampling a previously transferred portion of image pixel data;

c) means, within said single image processor, for concurrently spatially transforming each said sampled portion of said image pixel data in sequence while said means for sampling is sampling a subsequent portion of image pixel data; and

d) second means, within said single image processor, for transferring each said spatially transformed portion of said image pixel data to a pixel display memory for display.

The Examiner relies on the following reference:

Matsumoto	5,404,445 (filed Oct. 31, 1991)	Apr. 4, 1995

Claims 1, 4 through 7 and 10 through 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsumoto.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the brief and answer for the respective details thereof.

OPINION

After a careful review of the evidence before us, we will not sustain the rejection of claims 1, 4 through 7 and 10 through 12 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one

having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.***, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995) (***citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984)).

With respect to claim 1, the Examiner cites the individual elements of claim 1 and relates them to specific portions of Matsumoto (answer-page 3). The Examiner concludes by stating:

> It is noted that Matsumoto fails to explicitly teach the details of [the] process in which only a single processor is involved. However, Matsumoto's processor 212 (figure [2]) which control[s] the process is [the] only [] processor performing the operation (equivalent to Applicant's figure 2). Thus, it would have been obvious to a

> person of ordinary skill in the art at the time the invention was made to configure Matsumoto's system as claimed by using only processor 212 to perform the process. [Answer-page 3.]

Appellants argue that several portions of Matsumoto, cited by the Examiner, "fails to disclose even the slightest scintilla" of that which is claimed by Appellants. Further, Appellants contend, "that absolutely nothing within this cited portion of *Matsumoto* has anything to do with" what is being claimed.

We agree with Appellants. Matsumoto, at column 7, lines 32-45 (answer-page 3), deals with Format Translator 216 to convert **memory addresses** for a piece of graphics data from a VGA format to a format accessible to GSP 212. We fail to see how this teaches the claimed "a first means for **transferring** image pixel data from a memory to a temporary storage **a portion of image pixel data at a time**." (Emphasis added.)

Similarly, we fail to see how Matsumoto, column 9, lines 29-37 (answer-page 3), teaches the claimed "transferring includes **transferring** a portion of image pixel data **while** the

means for sampling is **concurrently sampling** a previously transferred portion...” (Emphasis added.) The cited passage of Matsumoto recites nothing about **sampling** or **transferring**, not to mention **concurrently**.

Likewise, we find nothing regarding the claimed “concurrently **spatially transforming** each said sampled portion...” (emphasis added) in the cited column 10, lines 14-25 of Matsumoto. This portion of Matsumoto relates to generating addresses so that data can be either read from or written to a memory.

The Examiner responds that sampling is implied by the cited portion of Matsumoto, and that spatially transforming is met by Matsumoto’s address generating scheme when considering a conventional 90-degree rotation. (Answer-page 4.)

We see no implied sampling. We do agree with the Examiner that a 90-degree rotation would be a spatial transformation, but we see no mention of such in the cited portion of Matsumoto.

Since there is no evidence in the record that Matsumoto teaches or suggests the elements of claim 1, nor the concurrent data transferring, sampling and spatial transforming, we will not sustain the Examiner’s rejection of this claim. The same elements discussed supra with respect to claim 1 also appear in the other independent claim 7. Thus we will not sustain the Examiner’s rejection of claim 7.

The remaining claims on appeal also contain the above limitations discussed in regard to claims 1 and 7 and thereby, we will not sustain the rejection as to these claims.

We have not sustained the rejection of claims 1, 4 through 7 and 10 through 12 under 35 U.S.C. § 103. Accordingly, the Examiner's decision is reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)	
JERRY SMITH Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
STUART N. HECKER Administrative Patent Judge	)	

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